

Explanation of Amendments in the Claims:

1.(currently amended) A tape for application onto a surface of an absorbent material to be monitored for detecting moisture in the absorbent material, the tape detection sensor comprising:

a substrate of dielectric, hydrophobic material with a bottom surface of the substrate arranged for application onto the surface of the absorbent material to be monitored;

two first and second elongate, parallel, spaced apart conductors secured to a top surface of the substrate;

a protective layer of non-hygroscopic, water pervious, dielectric material secured to the to the top surface of the substrate and extending over the conductors; and

a mounting adhesive on a bottom surface of the substrate for attachment of the substrate to the surface of the absorbent material;

the mounting adhesive being protected from adhering to other objects before being applied to the surface.

2.(cancelled)

3.(cancelled)

4.(currently amended) A sensor according to Claim 1 wherein the mounting adhesive is protected by 3 including a release sheet over the mounting adhesive.

5.(currently amended) A tape sensor according to Claim 1 wherein each of the conductors is a flat metal strip at least ~~no less than~~ 6.5 mm wide.

6.(currently amended) A tape sensor according to Claim 1 wherein the conductors are spaced apart by a distance of at least ~~no less than~~ 13 mm.

7.(currently amended) A tape sensor according to Claim 6 wherein the conductors are spaced apart by substantially 13.6 mm.

8.(currently amended) A tape sensor according to Claim 1 including a plurality of pairs of ~~at least two~~ moisture probes adapted to penetrate the protective layer, the respective

conductors and the substrate and to extend into a material building component to which the substrate has been adhered, each probe being a conductive element of corrosion resistant material.

9.(currently amended) An apparatus comprising a tape sensor according to Claim 8 ~~wherein each moisture probe comprises a substantially U-shaped metal element 1 and further including a sensor unit for applying a voltage across the two conductors and monitoring currents passing between the conductors so as to detect changes in resistance between the conductors caused by moisture in the material.~~

10.(cancelled)

11.(cancelled)

12.(currently amended) A method of detecting moisture in an absorbent material, the method comprising:

providing a tape formed by a substrate of a dielectric, hydrophobic material, a layer of a mounting adhesive on a bottom surface of the substrate and a first and a second spaced apart elongate parallel two conductors mounted on or adjacent a top surface of the substrate and extending therealong material; and

attaching the tape by the adhesive on to a surface of the material so as to mount the two conductors on or adjacent the surface of the material;

penetrating the first and second each conductors of the tape with a respective one of a pair of conductive probes such that each of the conductive probes engages into and the absorbent material and is electrically connected to the respective conductor with a conductive probe;

applying a voltage across the two conductors; and

monitoring currents passing between the conductors so as to detect changes in resistance between the conductors caused by moisture in the material.

13.(currently amended) A method according to claim 12 wherein the

~~conductors of the tape are covered by including mounting the conductors on a substrate of dielectric, hydrophobic material and covering them with a protective layer of non-hygroscopic, water pervious, dielectric material secured to the to the top surface of the substrate and extending over the conductors, and attaching the substrate to the surface by a mounting adhesive on a bottom surface of the substrate.~~

14.(cancelled)

15.(currently amended) A method according to claim 12 wherein each of the conductors is a flat metal strip at least ~~no less than~~ 6.5 mm wide.

16.(currently amended) A method according to claim 12 wherein the conductors are spaced apart by a distance of at least ~~no less than~~ 13 mm.

17.(cancelled)

18.(currently amended) A method according to claim 12 wherein each probe is a rigid elongate conductive element of corrosion resistant material which is forced into the material longitudinally of the element.

19.(currently amended) A method according to claim 12 wherein the absorbent material is a moisture permeable element of a building construction ~~two of the moisture probes are connected to form a substantially U-shaped metal element.~~

20.(currently amended) A method according to claim 19 including providing a plurality of pairs of conductive probes, locating each pair at respective spaced locations along the length of the tape and penetrating each pair into the absorbent material through the respective conductors at the location ~~wherein the U-shaped metal element is configured to be driven in by a conventional power stapler.~~

Please add new claims as follows:

21.(new) A method of detecting moisture in an absorbent material, the method comprising:

providing a tape formed by a substrate of dielectric, hydrophobic material, a layer

of a mounting adhesive on a bottom surface of the substrate and a first and a second spaced apart, elongate, parallel conductors mounted on a top surface of the substrate and extending therealong;

attaching the tape by the adhesive on to a surface of the material so as to mount the two conductors on or adjacent the surface of the material;

penetrating into the absorbent material through a surface of the material a plurality of pairs of conductive probes;

the probes of each pair being spaced apart such that current can flow through the material between the probes when moisture is present in the material;

the probes being located at spaced positions along a length of the material to be monitored;

electrically connecting one probe of each pair to the first one of the conductors;

electrically connecting a second probe of each pair to the second one of the conductors;

applying a voltage across the first and second conductors; and

monitoring currents passing between the conductors so as to detect changes in resistance between the conductors caused by moisture in the material.

22.(new) A method according to Claim 20 wherein the first and second conductors of the tape are covered by a protective layer of non-hygroscopic, water pervious, dielectric material secured to the top surface of the substrate and extending over the conductors.

23.(new) A method according to Claim 20 wherein each of the first and second conductors is a flat metal strip at least 6.5 mm wide.

24.(new) A method according to Claim 20 wherein the first and second conductors are spaced apart by a distance of at least 13 mm.

25.(new) A method according to Claim 20 wherein each probe is a rigid elongate conductive element of corrosion resistant material which is forced into the material

longitudinally of the element.

26.(new) A method according to Claim 20 wherein the absorbent material is a moisture permeable element of a building construction.